ARMY MEDICINE
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Administrative Cost Efficiency

DSC for Analysts / Common Operating Picture Information Brief

Ken Kovats, Maurine Tapscott & Richard Meyer

24 – 28 October 2016

UNCLASSIFIED / FOUO

Purpose and Outline

Purpose: Provide an overview of the Administrative Cost Efficiency model.

Outline:

1. Background
2. Concept
3. Ratio vs. Revenue
4. Components
5. Data & Method
6. Analyzing
7. Walkthrough

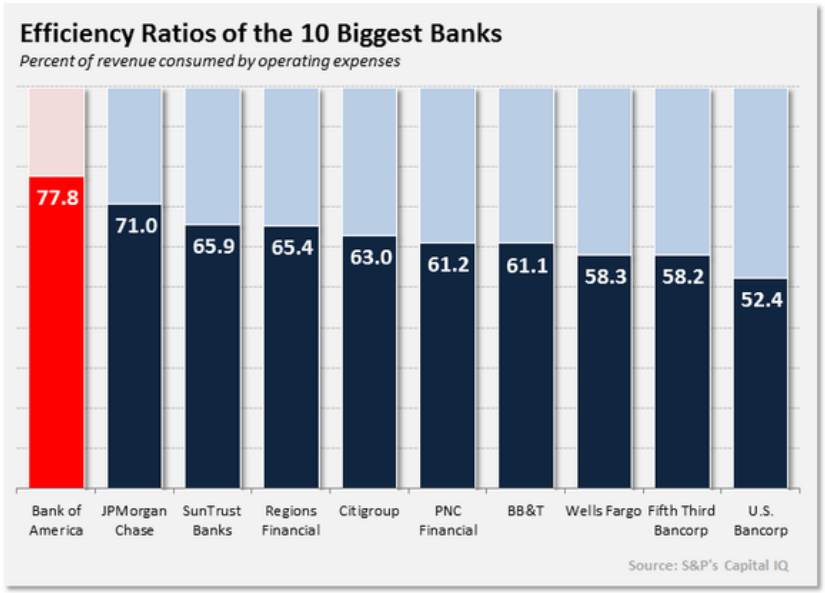
Ken Kovats

Background

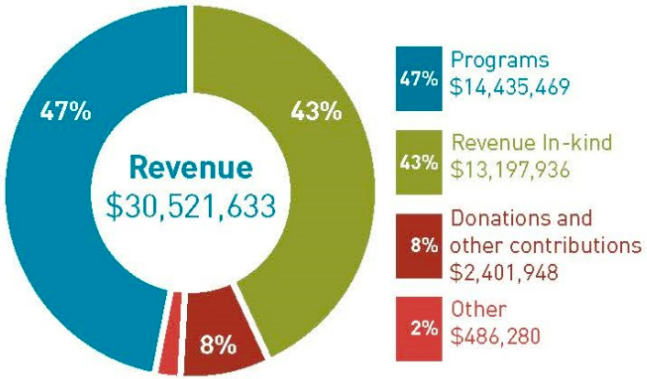
Provider Productivity

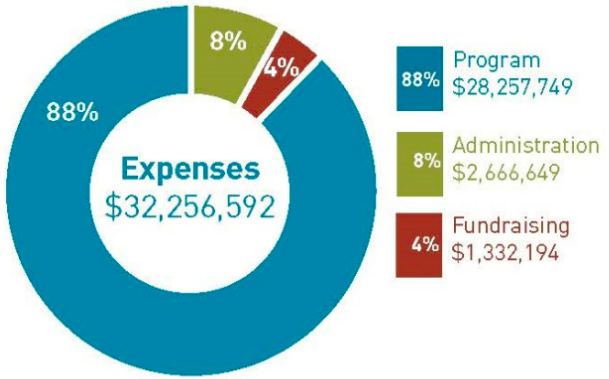
Administrative Efficiency

Background



CFC®
Combined Federal Campaign





Background

"How much does it cost – in administration expenses*-- to produce ONE DOLLAR in Healthcare Revenue?"

MEDCOM = $ .39 per $1.00 of Healthcare revenue

BAMC = $ .18 per $1.00 of Healthcare revenue
JAPAN= $ 1.02 per $1.00 of Healthcare revenue

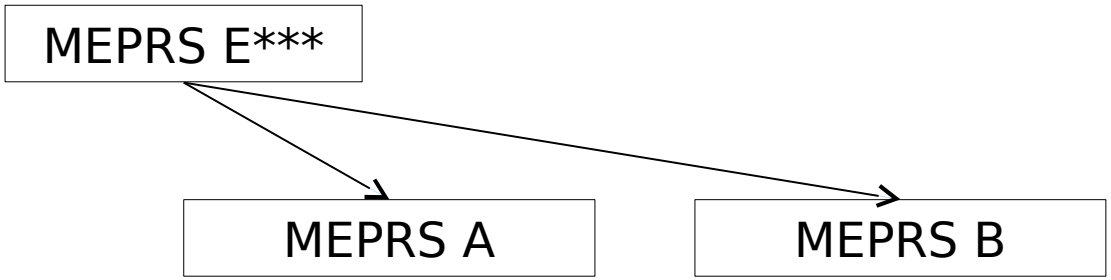
* *Administrative expenses (MEPRS-E) which step-down to clinical workcenters*

"Overhead ratio"

Admin Support Expenses

What are "Administrative Support Expenses"*?

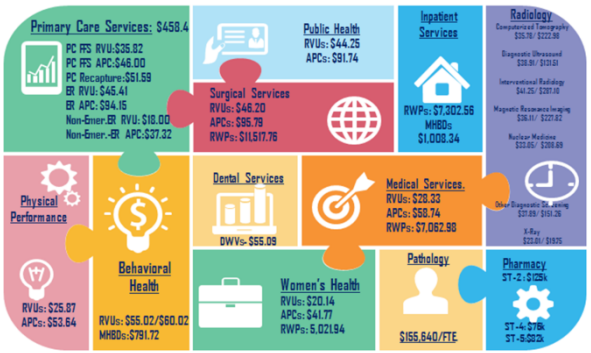
- Admin Expenses that step down to clinical workcenters



What are "Revenues"*?

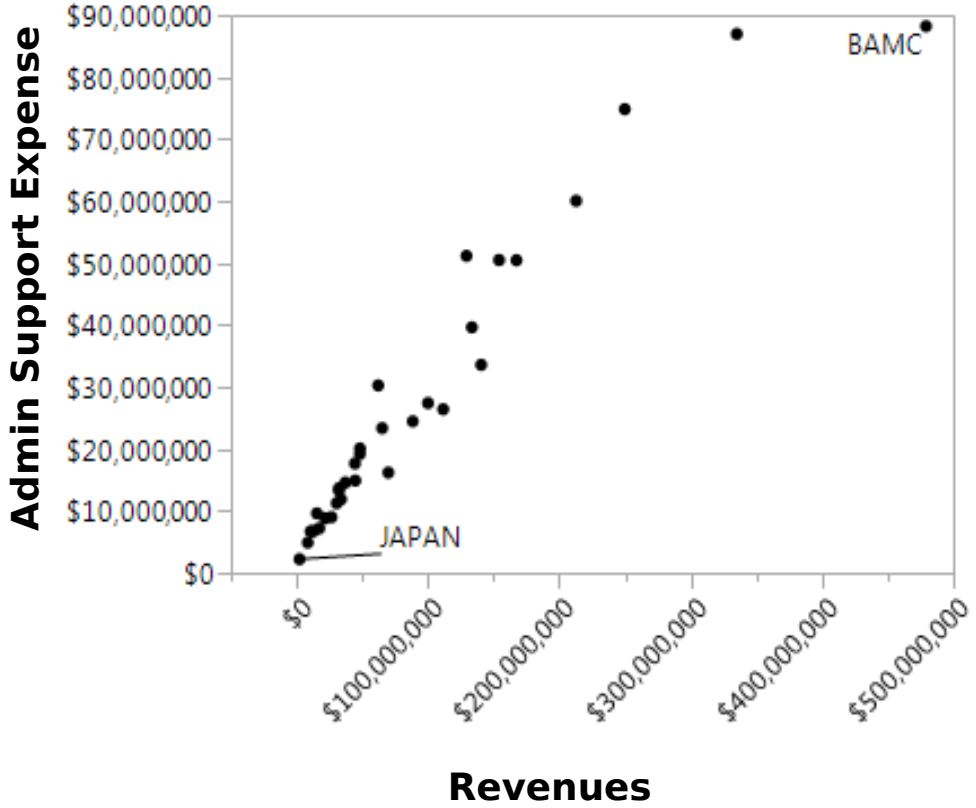
- Old ACE: PPS Rates
- New ACE: IRIS
  (PC Sub-cap or FFS)!

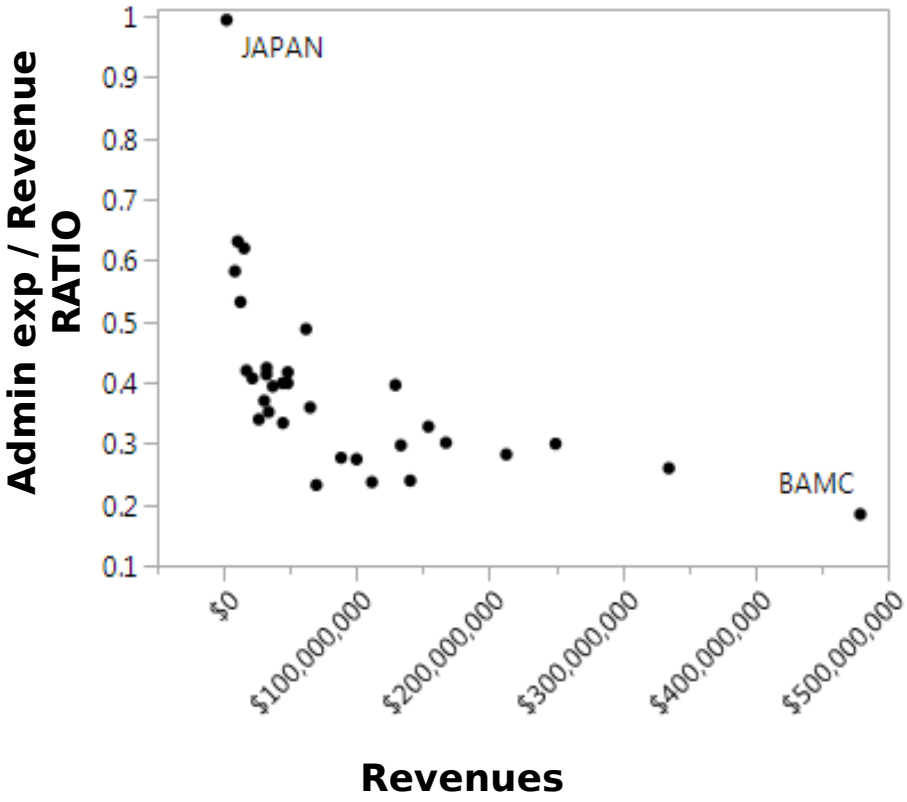
** More detail to follow!*



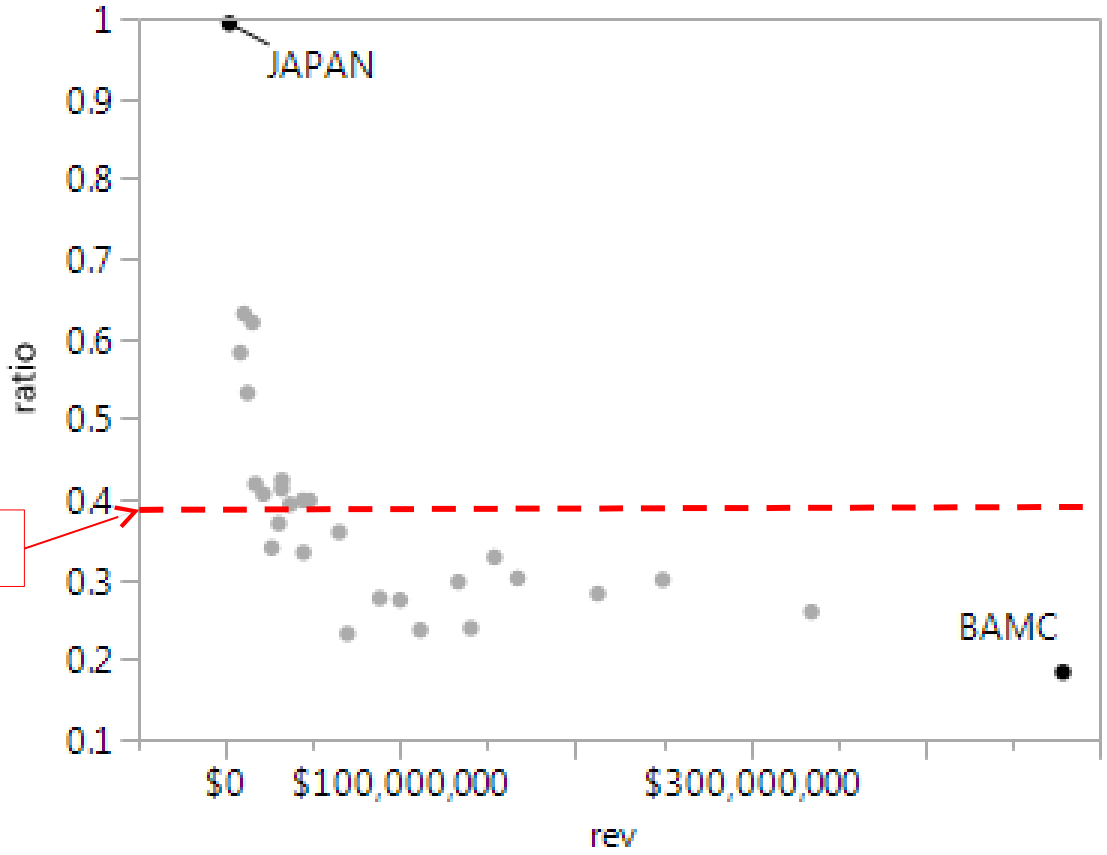
ACE Concepts

Revenue vs. Support Expenses by Parent MTF
(12 month period ending FY 15.12)





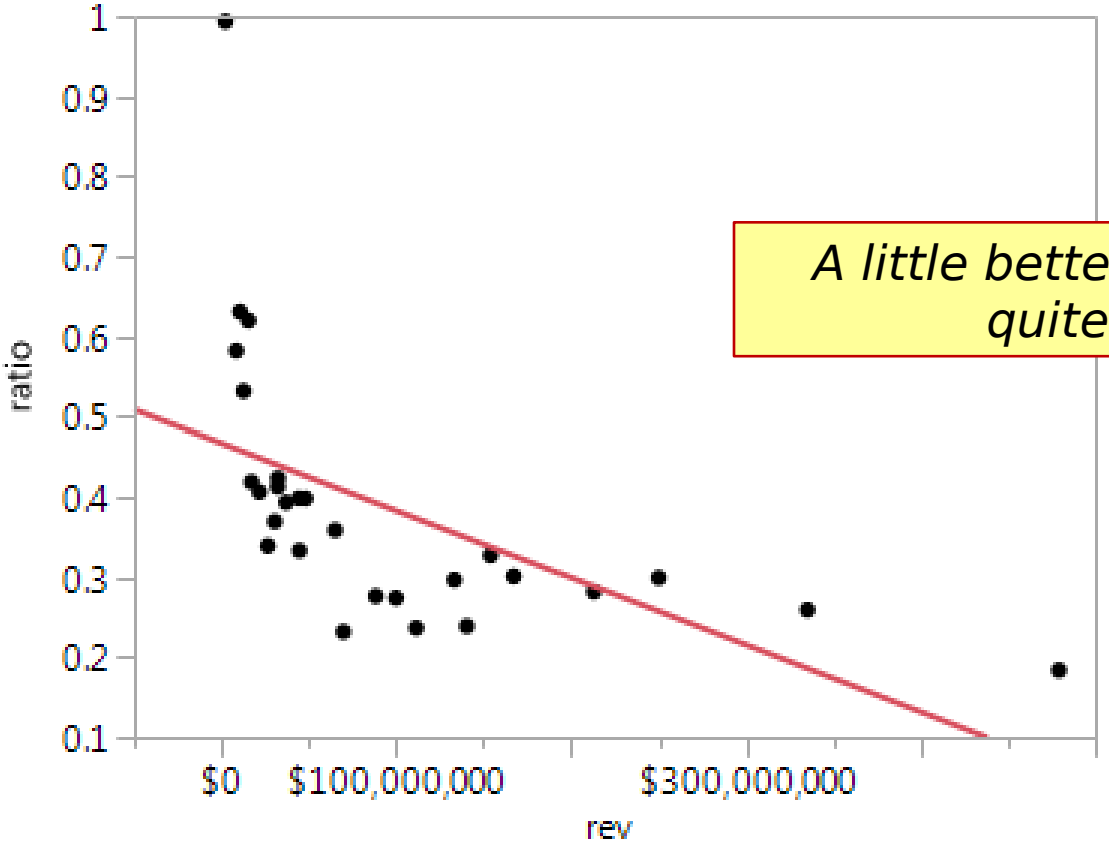
Setting up the "Expected Ratio" vs. Revenue



MEDCOM overall

Is this a "fair" target?

Setting up the "Expected Ratio" vs. Revenue

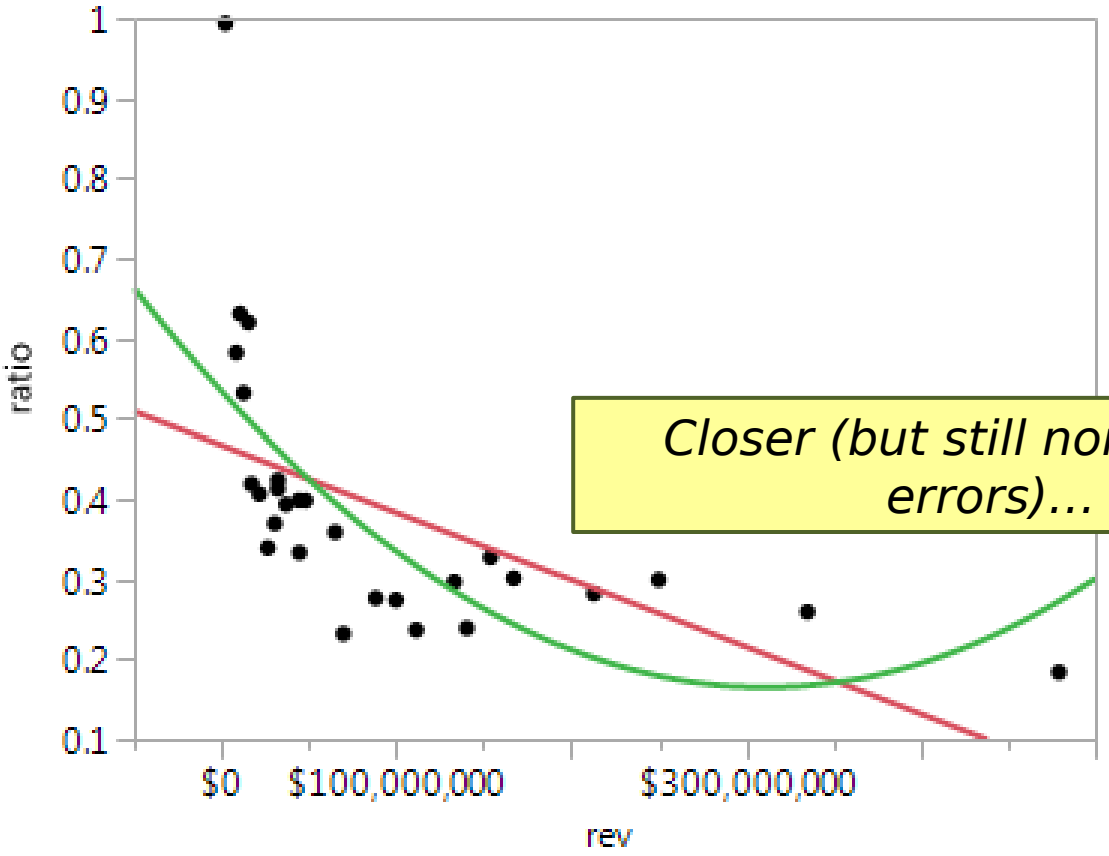


A little better, but not quite…

Linear Equation:

Ratio = **0.4671982** – (**8.38e-10***Revenue)

Setting up the "Expected Ratio" vs. Revenue

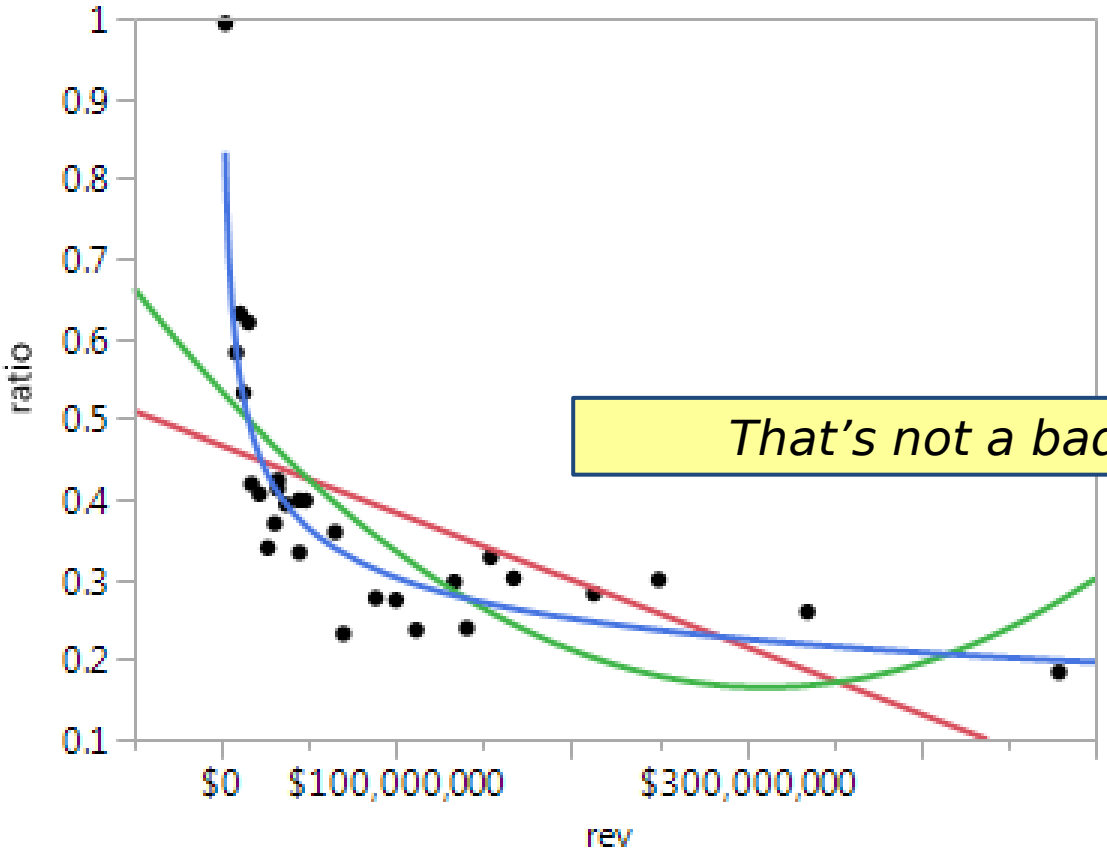


Closer (but still non-normal errors)…

Quadratic Equation:

Ratio = **0.499** - **1.64e-9***Revenue + **3.815e-18***(Rev-9.61e+7)^2

Setting up the "Expected Ratio" vs. Revenue

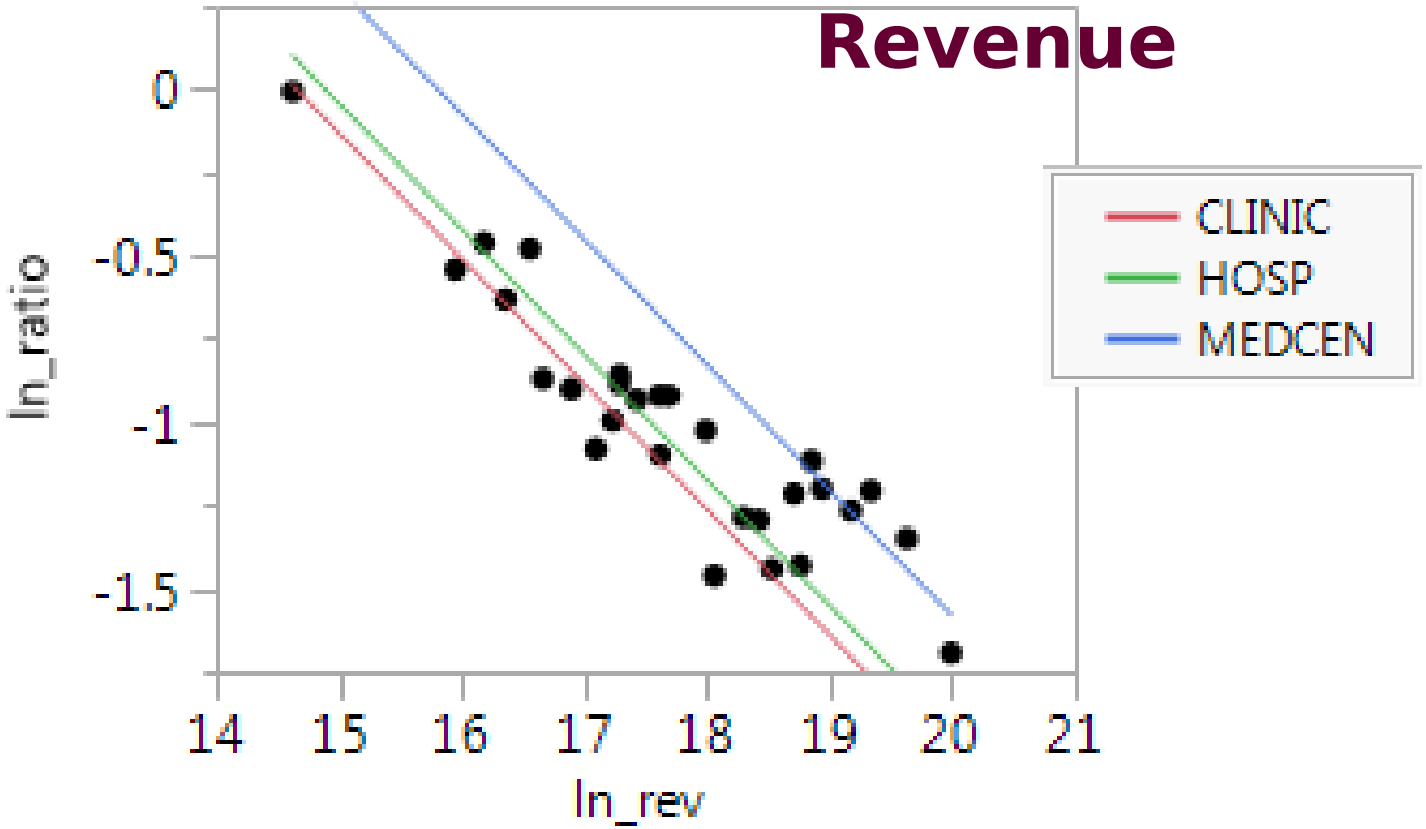


That's not a bad fit…!

Logarithmic Transformed Equation:

Log(ratio) = **3.7187289** - **0.2668572***Log(rev)

Setting up the "Expected Ratio" vs. Revenue



Logarithmic Transformed Equation:

Log(ratio) = - **0.37699***Log(rev) + **5.69887** +…

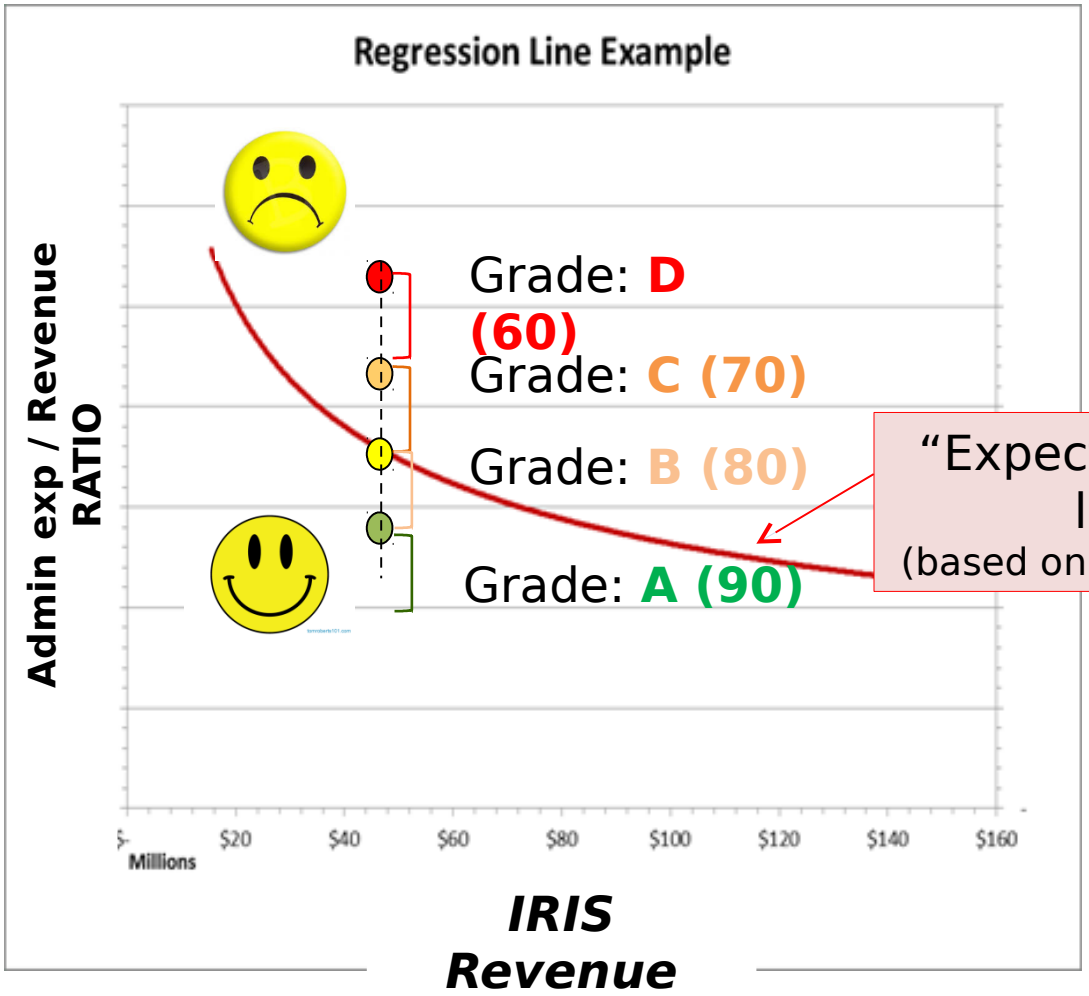
(-0.085) if HOSP

(-0.174) if CLINIC

(0) if MEDCEN

"SO WHAT?" : The Target ACE **ratio** is based on the MTF **Revenues** AND the MTF **Facility Type**!

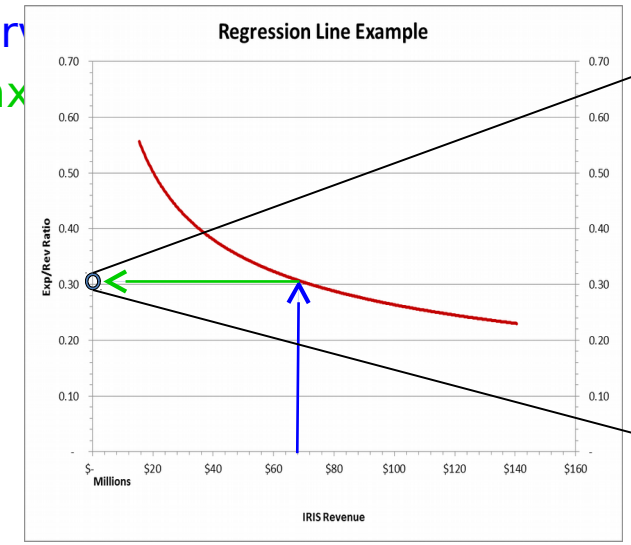
ACE Concept

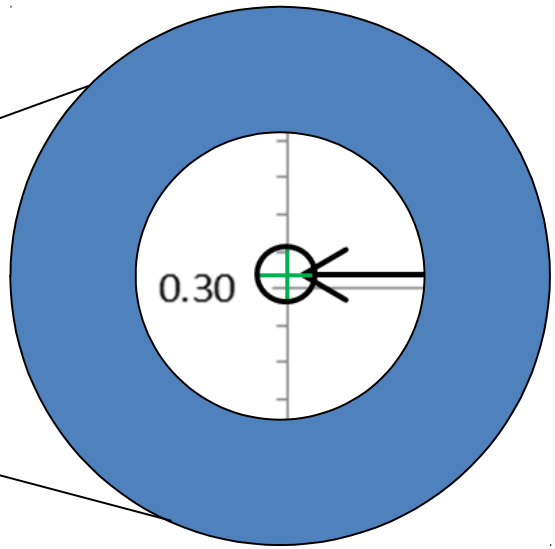

Regression Line Example
Admin exp / Revenue RATIO
Grade: D (60)
Grade: C (70)
Grade: B (80)
Grade: A (90)
"Expected ratio" line
(based on FY.FM 15.12)
$- Millions
$20
$40
$60
$80
$100
$120
$140
$160
IRIS Revenue

Richard Meyer

Components

- Revenue: From IRIS – sum of revenue components found on the Capacity and Fee for Service reports
- Expense: From EAS/MDR – Not a simple extract & drop – calculated using SAS®
- Ratio: Overhead Ratio - Determined by dividing the expense by the revenue - used for determining the Score and Grade
- Ratio Goal: Ratio needed to achieve 80%.
  - Simple Estimate
    - Find Revenue on the X Axis
    - Move up to the cur
    - Slide let to the Y ax





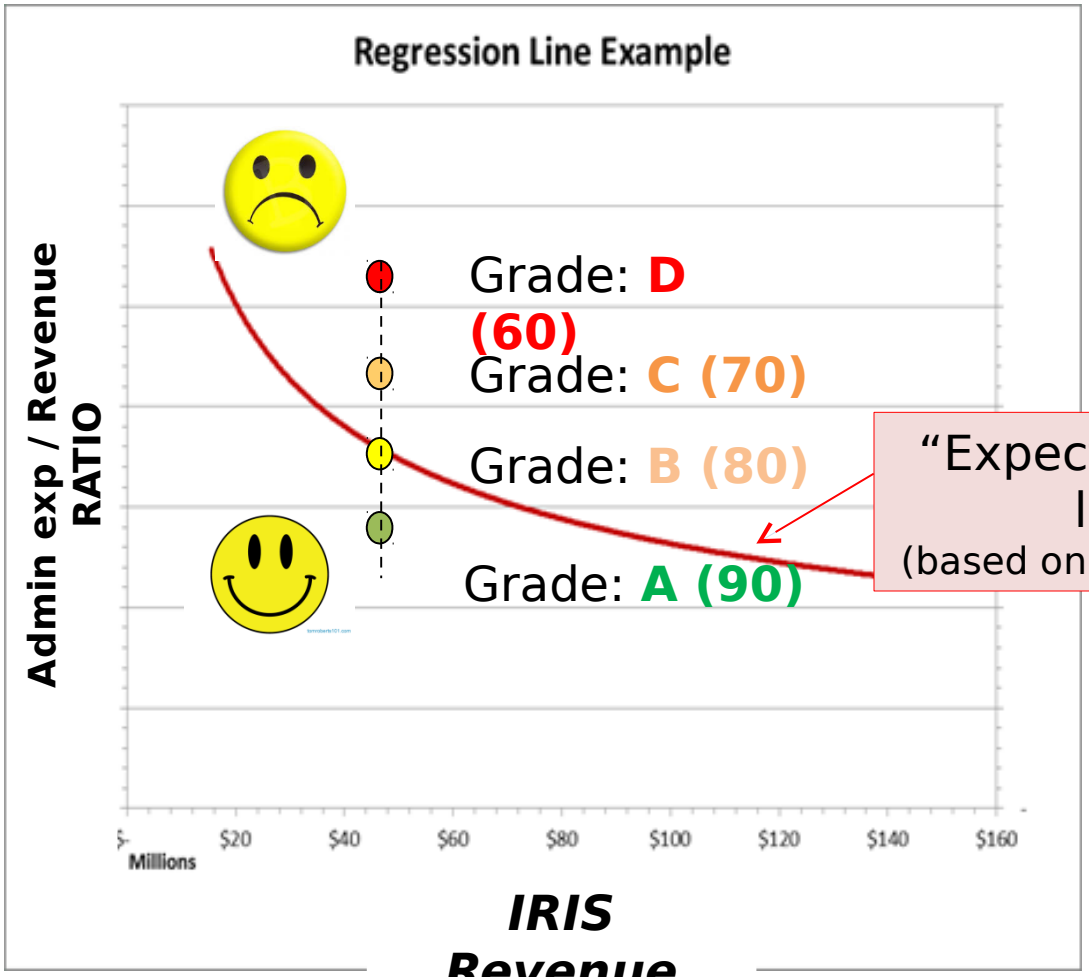
Components

- Ratio Goal: (continued)
  - Now…. Here is the math … How it is calculated in the model.
    - If you really, really, REALLY need to see the math, talk to us later.

- Expense Target: The amount of Administrative Expenses the MTF is expected to have spent based on the amount of revenue generated.
  - Calculated by multiplying the Ratio Goal by IRIS Revenue.

Components

- Grade: The Score converted to an Academic Grade
- Score: Above the line is better



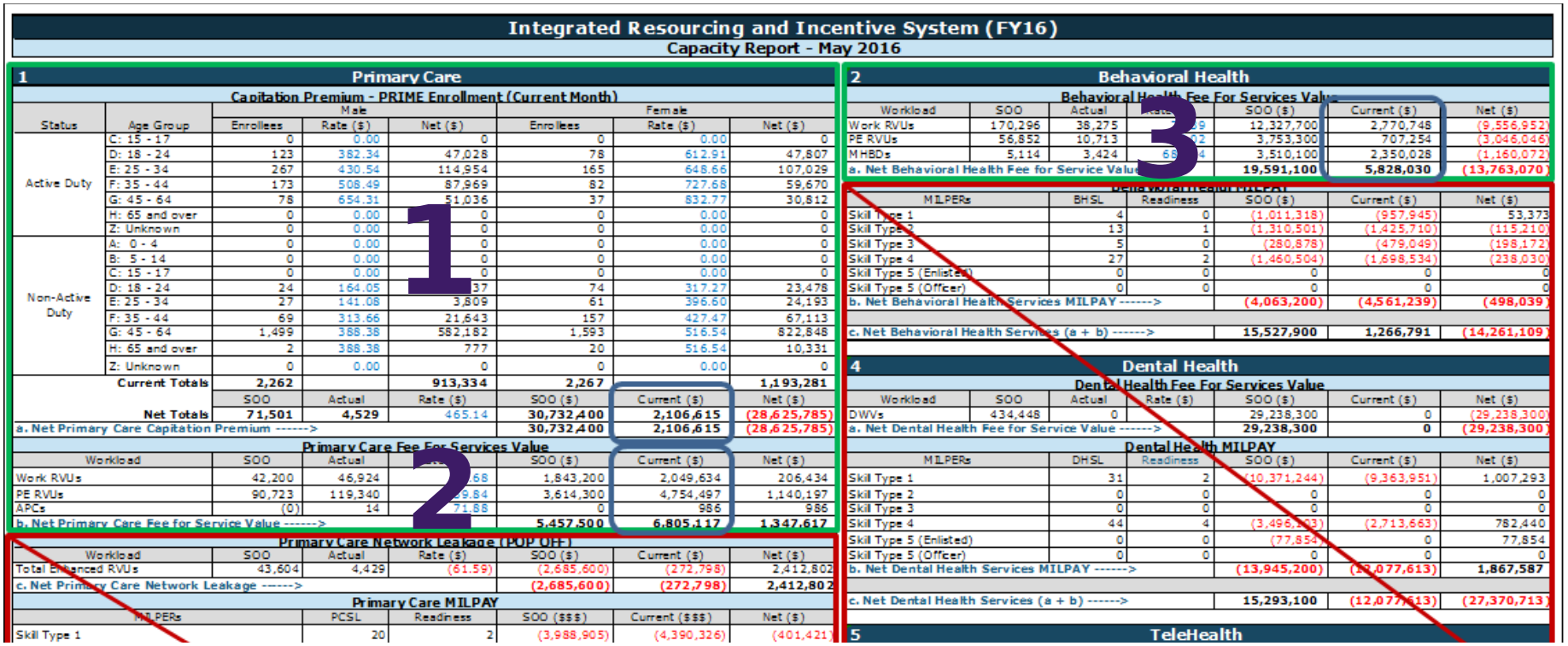
Data and Method

Revenue

- Past
  - Used a form of the TMA Prospective Payment System
  - RVUs, RWPs, and MHBDs multiplied by a set rates
- Present
  - Beginning with FY16 ACE uses IRIS revenue
  - Pure Revenue
    - No incentives (i.e. HEDIS)
    - No funding models (i.e. Admin)

Data and Method

- Revenue: Capacity Report
  1) Primary Care Sub-Capitation
  2) Primary Care Fee for Service
  3) Behavioral Health Fee for Service



Integrated Resourcing and Incentive System (FY16)
Capacity Report - May 2016

1 Primary Care

Capitation Premium - PRIME Enrollment (Current Month)

Status	Age Group	Male Enrollees	Male Rate ($)	Male Net ($)	Female Enrollees	Female Rate ($)	Female Net ($)
Active Duty	C: 15 - 17	0	0.00	0	0	0.00	0
	D: 18 - 24	123	382.34	47,028	78	612.91	47,807
	E: 25 - 34	267	430.54	114,954	165	648.66	107,029
	F: 35 - 44	173	508.49	87,969	82	727.68	59,670
	G: 45 - 64	78	654.31	51,036	37	832.77	30,812
	H: 65 and over	0	0.00	0	0	0.00	0
	Z: Unknown	0	0.00	0	0	0.00	0
Non-Active Duty	A: 0 - 4	0	0.00	0	0	0.00	0
	B: 5 - 14	0	0.00	0	0	0.00	0
	C: 15 - 17	0	0.00	0	0	0.00	0
	D: 18 - 24	24	164.05	37	74	317.27	23,478
	E: 25 - 34	27	141.08	3,809	61	396.60	24,193
	F: 35 - 44	69	313.66	21,643	157	427.47	67,113
	G: 45 - 64	1,499	388.38	582,182	1,593	516.54	822,848
	H: 65 and over	2	388.38	777	20	516.54	10,331
	Z: Unknown	0	0.00	0	0	0.00	0
	Current Totals	2,262		913,334	2,267		1,193,281
		SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
	Net Totals	71,501	4,529	465.14	30,732,400	2,106,615	(28,625,785)
a. Net Primary Care Capitation Premium ------>					30,732,400	2,106,615	(28,625,785)

Primary Care Fee For Services Value

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	42,200	46,924	[illegible]68	1,843,200	2,049,634	206,434
PE RVUs	90,723	119,340	[illegible]9.84	3,614,300	4,754,497	1,140,197
APCs	(0)	14	71.88	0	986	986
b. Net Primary Care Fee for Service Value ------>				5,457,500	6,805,117	1,347,617

Primary Care Network Leakage (POP OH)

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Total Enhanced RVUs	43,604	4,429	(61.59)	(2,685,600)	(272,798)	2,412,802
c. Net Primary Care Network Leakage ------>				(2,685,600)	(272,798)	2,412,802

Primary Care MILPAY

MILPERs	PCSL	Readiness	SOO ($$$)	Current ($$$)	Net ($)
Skill Type 1	20	2	(3,988,905)	(4,390,326)	(401,421)

2 Behavioral Health

Behavioral Health Fee For Services Value

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	170,296	38,275	[illegible]29	12,327,700	2,770,748	(9,556,952)
PE RVUs	56,852	10,713	[illegible]52	3,753,300	707,254	(3,046,046)
MHBDs	5,114	3,424	68[illegible]4	3,510,100	2,350,028	(1,160,072)
a. Net Behavioral Health Fee for Service Value ------>				19,591,100	5,828,030	(13,763,070)

Behavioral Health MILPAY

MILPERs	BHSL	Readiness	SOO ($)	Current ($)	Net ($)
Skill Type 1	4	0	(1,011,318)	(957,945)	53,373
Skill Type 2	13	1	(1,310,501)	(1,425,710)	(115,210)
Skill Type 3	5	0	(280,878)	(479,049)	(198,172)
Skill Type 4	27	2	(1,460,504)	(1,698,534)	(238,030)
Skill Type 5 (Enlisted)	0	0	0	0	0
Skill Type 5 (Officer)	0	0	0	0	0
b. Net Behavioral Health Services MILPAY ------>			(4,063,200)	(4,561,239)	(498,039)
c. Net Behavioral Health Services (a + b) ------>			15,527,900	1,266,791	(14,261,109)

4 Dental Health

Dental Health Fee For Services Value

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
DWVs	434,448	0		29,238,300	0	(29,238,300)
a. Net Dental Health Fee for Service Value ------>				29,238,300	0	(29,238,300)

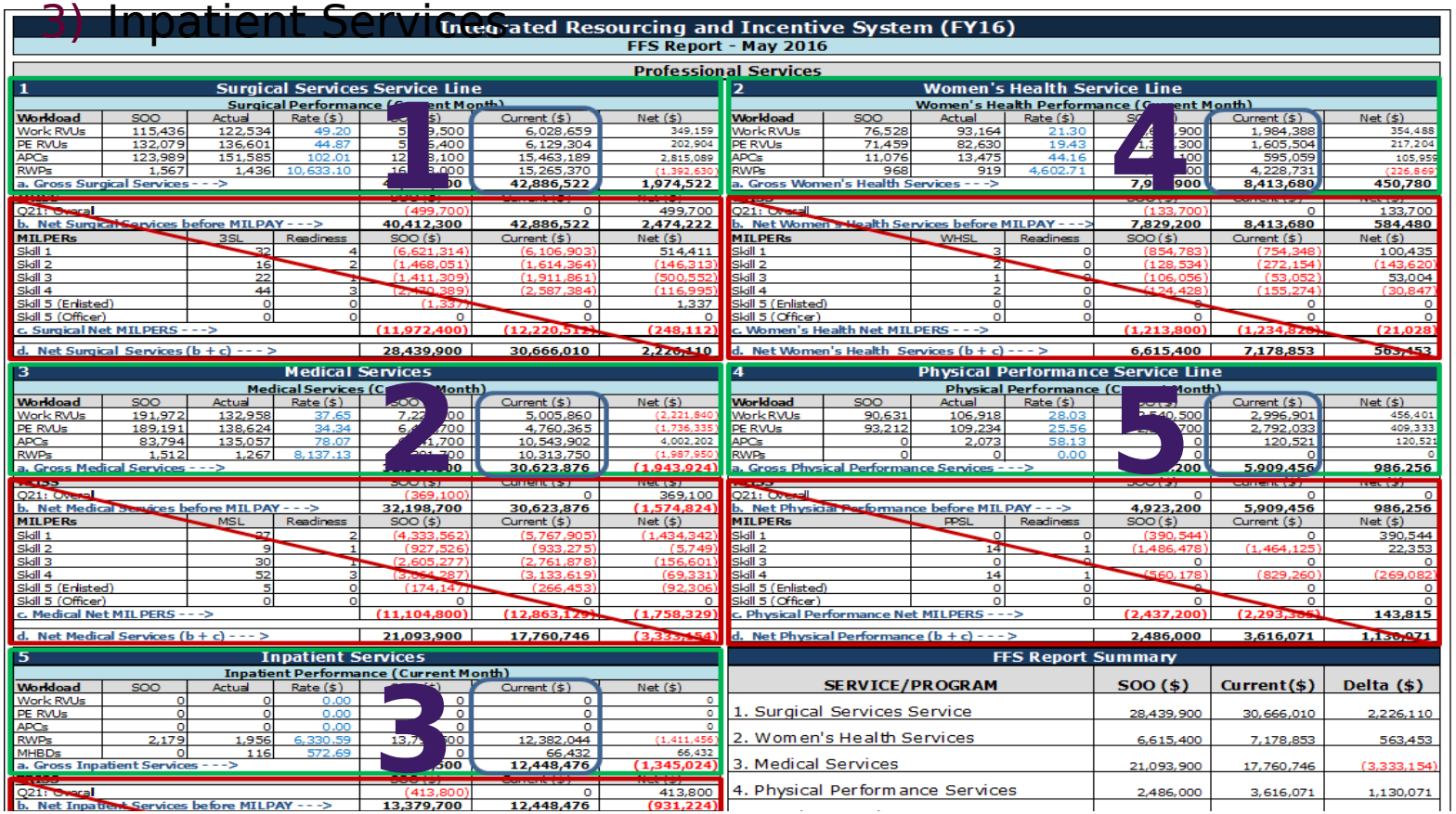
Dental Health MILPAY

MILPERs	DHSL	Readiness	SOO ($)	Current ($)	Net ($)
Skill Type 1	31	2	(10,371,244)	(9,363,951)	1,007,293
Skill Type 2	0	0	0	0	0
Skill Type 3	0	0	0	0	0
Skill Type 4	44	4	(3,496,103)	(2,713,663)	782,440
Skill Type 5 (Enlisted)	0	0	(77,854)	0	77,854
Skill Type 5 (Officer)	0	0	0	0	0
b. Net Dental Health Services MILPAY ------>			(13,945,200)	(12,077,613)	1,867,587
c. Net Dental Health Services (a + b) ------>			15,293,100	(12,077,613)	(27,370,713)

5 TeleHealth

Data and Method

- Revenue: Fee for Service Report
  1) Surgical Services
  2) Medical Services
  3) Inpatient Services
  4) Women's Health
  5) Physical Performance



Integrated Resourcing and Incentive System (FY16)
FFS Report - May 2016

Professional Services

1 Surgical Services Service Line

Surgical Performance (Current Month)

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	115,436	122,534	49.20	5,679,500	6,028,659	349,159
PE RVUs	132,079	136,601	44.87	5,926,400	6,129,304	202,904
APCs	123,989	151,585	102.01	12,649,100	15,463,189	2,815,089
RWPs	1,567	1,436	10,633.10	16,657,900	15,265,370	(1,392,530)
a. Gross Surgical Services - - ->				40,912,900	42,886,522	1,974,522
Q21: Overall				(499,700)	0	499,700
b. Net Surgical Services before MILPAY - - ->				40,412,300	42,886,522	2,474,222
MILPERs	3SL	Readiness		SOO ($)	Current ($)	Net ($)
Skill 1	22	4		(6,621,314)	(6,106,903)	514,411
Skill 2	16	2		(1,468,051)	(1,614,364)	(146,313)
Skill 3	22	1		(1,411,309)	(1,911,861)	(500,552)
Skill 4	44	3		(2,470,389)	(2,587,384)	(116,995)
Skill 5 (Enlisted)	0	0		(1,337)	0	1,337
Skill 5 (Officer)	0	0		0	0	0
c. Surgical Net MILPERS - - ->				(11,972,400)	(12,220,512)	(248,112)
d. Net Surgical Services (b + c) - - ->				28,439,900	30,666,010	2,226,110

2 Women's Health Service Line

Women's Health Performance (Current Month)

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	76,528	93,164	21.30	1,630,900	1,984,388	354,488
PE RVUs	71,459	82,630	19.43	1,388,300	1,605,504	217,204
APCs	11,076	13,475	44.16	489,100	595,059	105,959
RWPs	968	919	4,602.71	4,454,600	4,228,731	(226,869)
a. Gross Women's Health Services - - ->				7,963,900	8,413,680	450,780
Q21: Overall				(133,700)	0	133,700
b. Net Women's Health Services before MILPAY - - ->				7,829,200	8,413,680	584,480
MILPERs	WHSL	Readiness		SOO ($)	Current ($)	Net ($)
Skill 1	3	0		(854,783)	(754,348)	100,435
Skill 2	2	0		(128,534)	(272,154)	(143,620)
Skill 3	1	0		(106,056)	(53,052)	53,004
Skill 4	2	0		(124,428)	(155,274)	(30,847)
Skill 5 (Enlisted)	0	0		0	0	0
Skill 5 (Officer)	0	0		0	0	0
c. Women's Health Net MILPERS - - ->				(1,213,800)	(1,234,828)	(21,028)
d. Net Women's Health Services (b + c) - - ->				6,615,400	7,178,853	563,453

3 Medical Services

Medical Services (Current Month)

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	191,972	132,958	37.65	7,227,700	5,005,860	(2,221,840)
PE RVUs	189,191	138,624	34.34	6,497,700	4,760,365	(1,736,335)
APCs	83,794	135,057	78.07	10,541,700	10,543,902	4,002,202
RWPs	1,512	1,267	8,137.13	12,301,700	10,313,750	(1,987,950)
a. Gross Medical Services - - ->				32,568,800	30,623,876	(1,943,924)
Q21: Overall				(369,100)	0	369,100
b. Net Medical Services before MILPAY - - ->				32,198,700	30,623,876	(1,574,824)
MILPERs	MSL	Readiness		SOO ($)	Current ($)	Net ($)
Skill 1	27	2		(4,333,562)	(5,767,905)	(1,434,342)
Skill 2	9	1		(927,526)	(933,275)	(5,749)
Skill 3	30	1		(2,605,277)	(2,761,878)	(156,601)
Skill 4	52	3		(3,064,287)	(3,133,619)	(69,331)
Skill 5 (Enlisted)	5	0		(174,147)	(266,453)	(92,306)
Skill 5 (Officer)	0	0		0	0	0
c. Medical Net MILPERS - - ->				(11,104,800)	(12,863,129)	(1,758,329)
d. Net Medical Services (b + c) - - ->				21,093,900	17,760,746	(3,333,154)

4 Physical Performance Service Line

Physical Performance (Current Month)

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	90,631	106,918	28.03	2,540,500	2,996,901	456,401
PE RVUs	93,212	109,234	25.56	2,382,700	2,792,033	409,333
APCs	0	2,073	58.13	0	120,521	120,521
RWPs	0	0	0.00	0	0	0
a. Gross Physical Performance Services - - ->				4,923,200	5,909,456	986,256
Q21: Overall				0	0	0
b. Net Physical Performance before MILPAY - - ->				4,923,200	5,909,456	986,256
MILPERs	PPSL	Readiness		SOO ($)	Current ($)	Net ($)
Skill 1	0	0		(390,544)	0	390,544
Skill 2	14	1		(1,486,478)	(1,464,125)	22,353
Skill 3	0	0		0	0	0
Skill 4	14	1		(560,178)	(829,260)	(269,082)
Skill 5 (Enlisted)	0	0		0	0	0
Skill 5 (Officer)	0	0		0	0	0
c. Physical Performance Net MILPERS - - ->				(2,437,200)	(2,293,385)	143,815
d. Net Physical Performance (b + c) - - ->				2,486,000	3,616,071	1,130,071

5 Inpatient Services

Inpatient Performance (Current Month)

Workload	SOO	Actual	Rate ($)	SOO ($)	Current ($)	Net ($)
Work RVUs	0	0	0.00	0	0	0
PE RVUs	0	0	0.00	0	0	0
APCs	0	0	0.00	0	0	0
RWPs	2,179	1,956	6,330.59	13,793,600	12,382,044	(1,411,556)
MHBDs	0	116	572.69	0	66,432	66,432
a. Gross Inpatient Services - - ->				13,793,600	12,448,476	(1,345,024)
Q21: Overall				(413,800)	0	413,800
b. Net Inpatient Services before MILPAY - - ->				13,379,700	12,448,476	(931,224)

FFS Report Summary

SERVICE/PROGRAM	SOO ($)	Current ($)	Delta ($)
1. Surgical Services Service	28,439,900	30,666,010	2,226,110
2. Women's Health Services	6,615,400	7,178,853	563,453
3. Medical Services	21,093,900	17,760,746	(3,333,154)
4. Physical Performance Services	2,486,000	3,616,071	1,130,071

Maurine Tapscott

Data and Method

Expenses

- ACE expenses represent those MEPRS E administrative expenses which are stepped-down to the MEPRS A and B work centers. Some administrative step-down expenses are excluded from the ACE expense calculation - especially those expenses which are indirect or beyond the Commander's ability to affect. They include:
  - Utilities
  - Contract Health Care
  - Medical Supplies and Pharmacy supplies and materials
  - Med/Dental Equipment
  - Depreciation
  - Free Receipts of utilities, contract medical care, other services, O&M and facilities (including facilities restoration and modernization)
- See list of applicable SFECs in the backup slides.

Data and Method

- Data source: EAS-IV Repository
  - Three queries to attain necessary data:

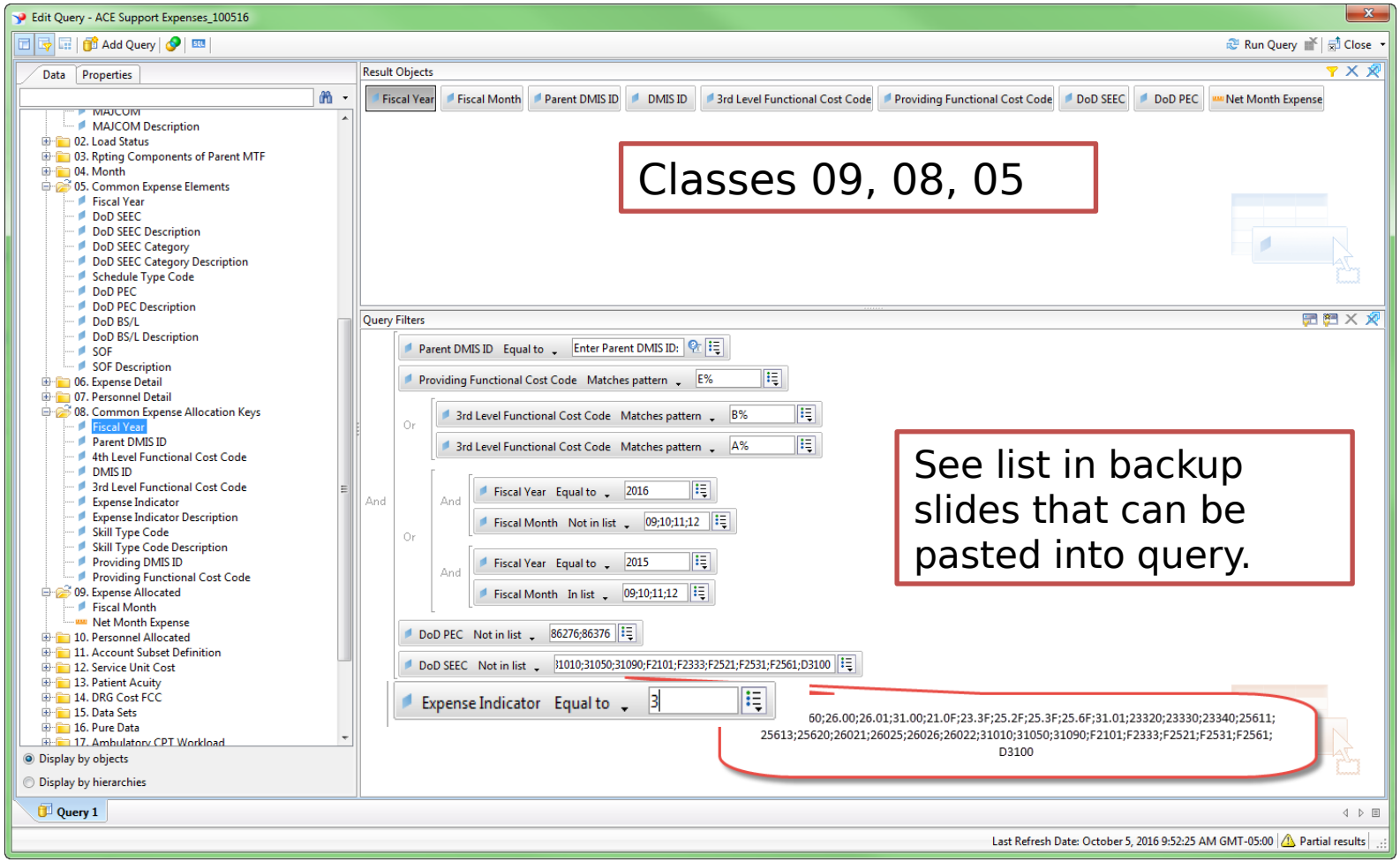
1. Stepdown E Expenses to A and B accounts from Classes 09, 08, 05 – including SEECs and PECs from Class 05).

2. EDB, EDC, and EDD direct expense (Expense Indicator='1'), also from Classes 09, 08, 05 – will go into more detail in a few minutes.

3. Square Footage – from Class 15 (used to manually allocate the above EDB, EDC, and EDD expenses).

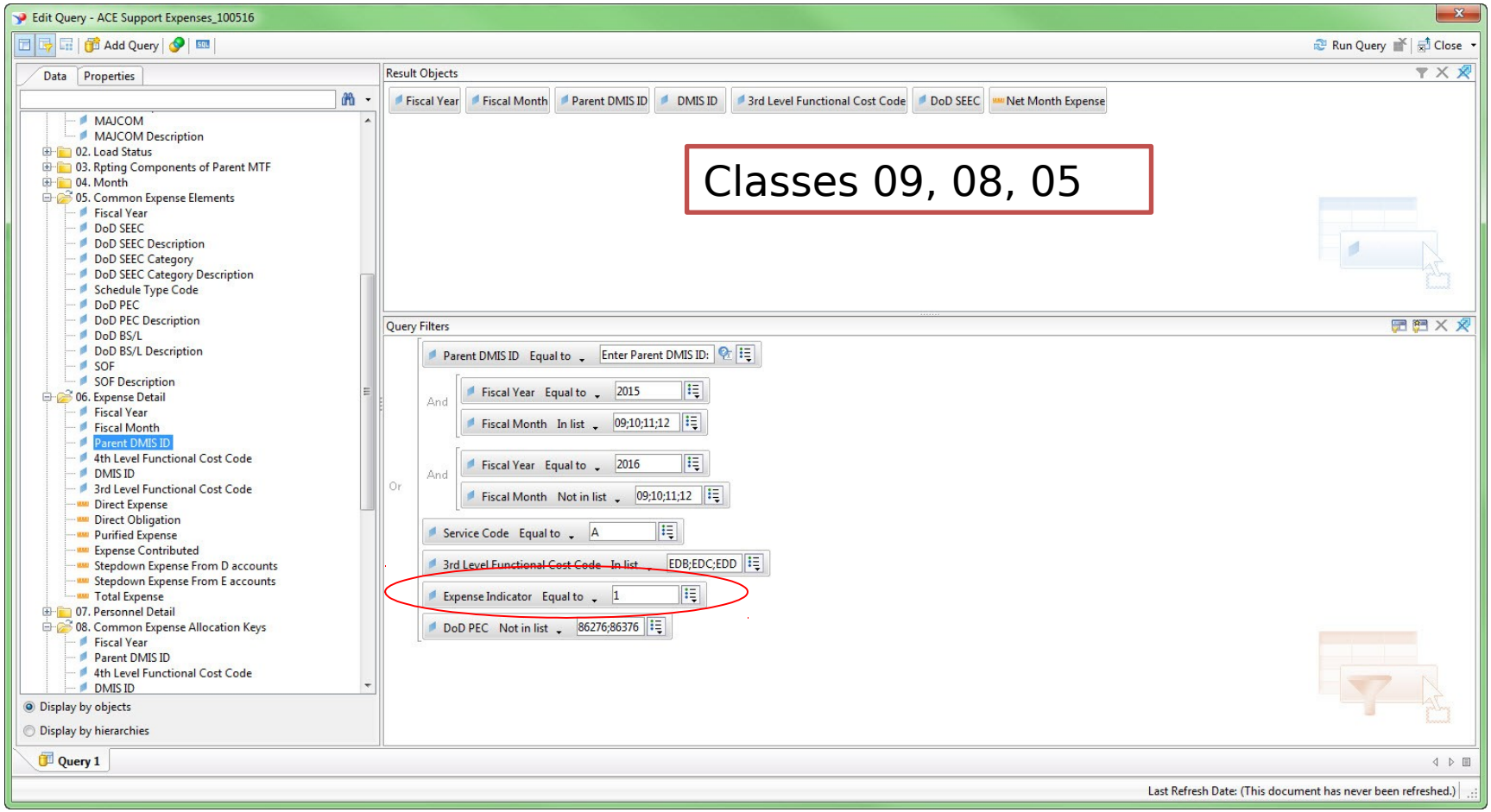
Data and Method

- Expenses – ACE Support Expenses – EAS-IV Repository



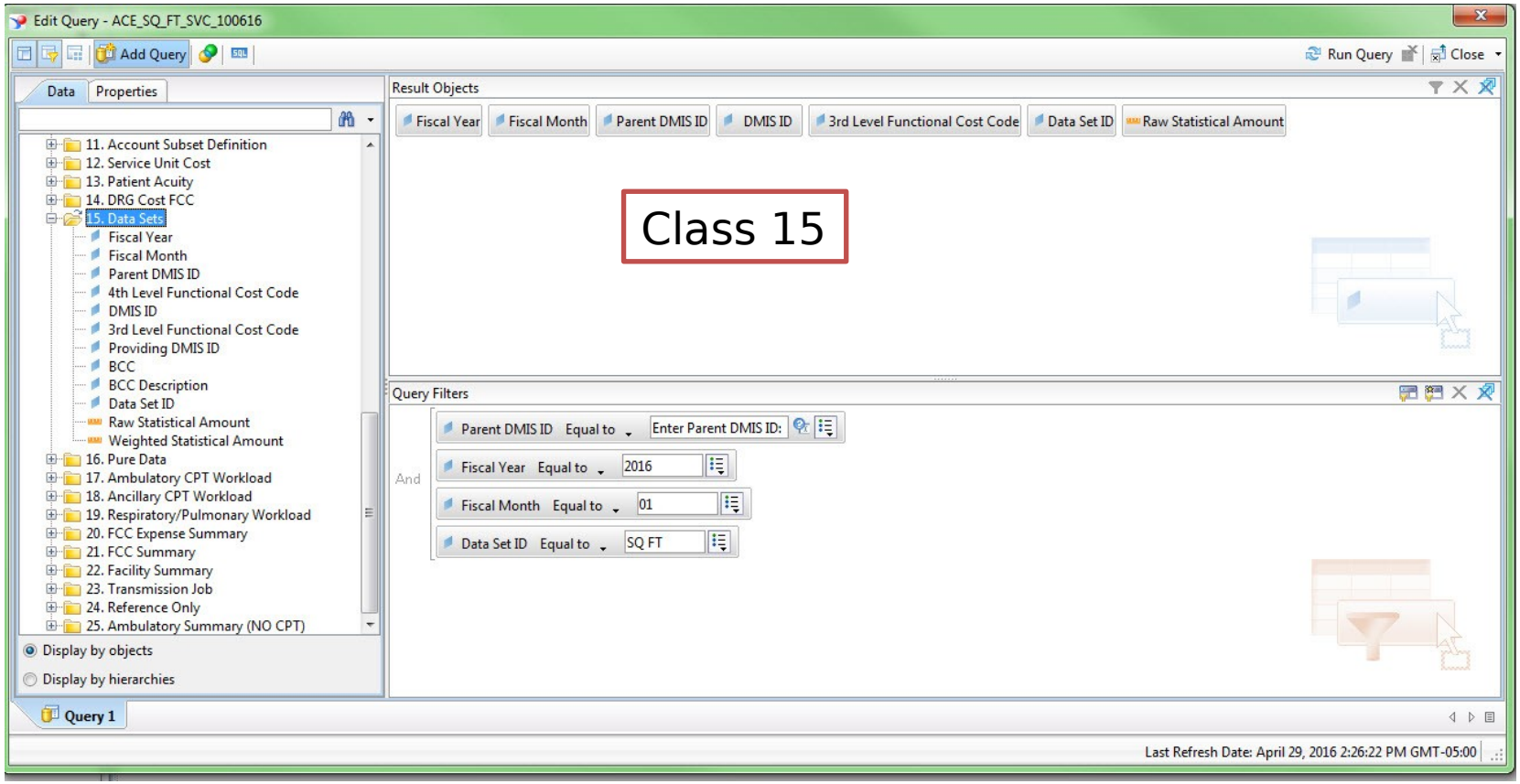
Data and Method

- Expenses – ACE EDB, EDC, EDD Direct Expenses



Data and Method

- Expenses – Square Footage



Methodology

- Exclusions to ACE Qualifying Support Expenses
  - Exclusions by SEEC (already discussed) stepped down to the A and B accounts;
  - Support expenses in PECs 86276 and 86376, Facilities Modernization and Restoration (new exemption).
  - EDB, EDC, and EDD exemptions are manually calculated (history and methodology coming up next).

Methodology

- EDB, EDC, EDD History and Methodology
  - EDB (Operation of Utilities);
  - EDC (Maintenance of Real Property);
  - EDD (Minor Construction).
- The issue with excluding these expenses from Class 09 is that their value has already been altered by expenses already stepped down in the higher ASN (Assignment Sequence Numbers).
  - For example, the ASN (Assignment Sequence Numbers) as defined by DoD 6010.13-M, for these codes is 6, 7, and 8, respectively. Ahead of them are the sequence numbers for the depreciation accounts, so the amount reported in Class 09, Expense Indicator=3 already has the depreciation expense altered.

Methodology

- Solution - Manually allocate the expenses from EDB, EDC, and EDD.
  - Apply condition of Expense Indicator=1 (direct expenses) to get the original value of the EDB, EDC, and EDD accounts.
  - From Class 15, get the square footage of the final accounts at each MTF (A,B,C,F,G) so that the total amount of ED* can be accounted for in the end.
  - Divide the total EDB,EDC,EDD expenses by the total square footage to calculate the *COST PER SQUARE FOOT* of the ED* expenses.
  - Then, multiply the cost per square foot by the square footage in the A and B accounts to get the amount to be exempted from the ACE expenses.

Methodology

- MTFs with Multiple Remote Independent Clinics
  - The ACE Score for MTFs with multiple remote, independent children will be weighted, blended score/grade from each individual child MTF ACE score
    - Accounts for the Extra admin/command/support burden and separation in an overseas environment.
    - To qualify, Parent must have multiple remote clinics with a Clinic Commander assigned and over 50% of Child MTFs ACE support expenses come from that Child MTF.

$$\text{Parent ACE Grade} = \sum \frac{(\text{Child MTF Revenue})}{(\text{Parent MTF Revenue})} * (\text{Child ACE Grade})$$

Parent ACE Grade = * (Child ACE Grade)

- The affected sites are Ft Meade, Landstuhl, Bavaria, and Korea.

Trivia Question

How much of the total administrative expense allocated to A and B contributes to the ACE expense?

Richard Meyer

Analyzing

- Two Routes
  - Revenue
    - IRIS (https://medcom-fmis.amedd.army.mil)
      - Performance Planning
      - Execution
  - Expenses
- Data Quality, Data Quality, Data Quality…
  - Budget guidance
  - Square footage
  - Expenses

Way Ahead

- Changes being considered
  - Addition of the Dental and other budget models
  - Move to web based automation

Walkthrough

Administrative Cost Efficiency (ACE)

Summary

MTF Selector

Data Dictionary

User's Manual

Fiscal Period: 201512

Updated on: 3/14/2016

Data as of:

SINCE 1775

List of excluded SEEC Codes in E Expense Stepdown query:

23.30	COMMUNICATIONS, UTILITIES & MISC CHARGES
25.60	CONTRACT MEDICAL CARE
26.00	SUPPLIES AND MATERIALS
26.01	PHARMACEUTICAL SUPPLIES AND MATERIALS
31.00	EQUIPMENT
21.0F	TRAVEL & TRANSPORTATION OF PERSONS (FREE RECEIPT)
23.3F	COMMUNICATIONS, UTILITIES & MISC (FREE RECEIPT)
25.2F	OTH SVCS FROM NON-FEDERAL SOURCES (FREE RECEIPT)
25.3F	OTH GOODS & SVCS FROM FEDERAL SOURCES (FREE REC)
25.6F	CONTRACT MEDICAL CARE (FREE RECEIPT)
31.01	EQUIPMENT DEPRECIATION
23320	PURCHASED COMMUNICATION AND MISCELLANEOUS CHARGES
23330	UTILITY SERVICES
23340	POSTAL SERVICES AND RENTALS
25611	PURCHASED MEDICAL CARE
25613	HEALTHCARE SERVICES - MEDICAL SERVICES
25620	HEALTHCARE SVCS-SUPPLEMENTAL AND COOPERATIVE CARE
26021	VACCINE/IMMUNIZATION
26025	MEDICAL SUPPLIES - MTF
26026	NON-MEDICAL SUPPLIES AND MATERIALS
26022	PHARMACEUTICAL MEDICATION
31010	EQUIPMENT - ARMY FUND EQUIPMENT
31050	EQUIPMENT - GSA MANAGED EQUIPMENT
31090	IT AND TELECOMMUNICATIONS EQUIPMENT AND SOFTWARE
F2101	FREE RECEIPT - TRAVEL & TRANSPORTATION OF PERSONS
F2333	FREE RECEIPTS - UTILITY SERVICES
F2521	FREE RECEIPTS - OTHER SERVICES (NON-FED)
F2531	FREE RECEIPTS - OTH PURCHASE FROM FED SOURCE
F2561	FREE RECEIPTS - CONTRACT MEDICAL CARE
D3100	EQUIPMENT DEPRECIATION

Ready to paste into BOXi Conditions query (using ‘not in list’ condition):

23.30;25.60;26.00;26.01;31.00;21.0F;23.3F;25.2F;25.3F;25.6F;31.01;23320;23330;23340;25611;25613;25620;26021;26025;26026;2602231010;31050;31090;F2101;F2333;F2521;F2531;F2561;D3100